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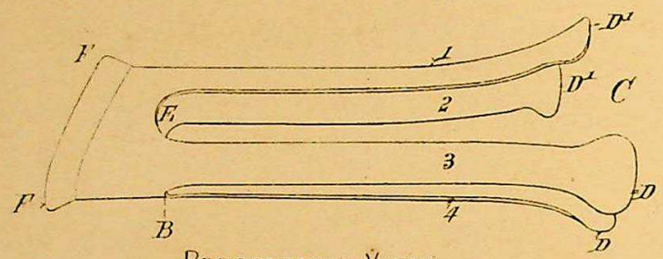
123, SURGERY,
Speculums.

VAGINAL SPECULUM

Jerman Silva

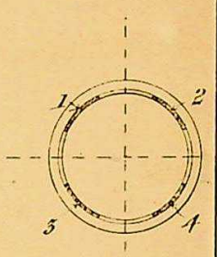
2054/84

FIG. 1.



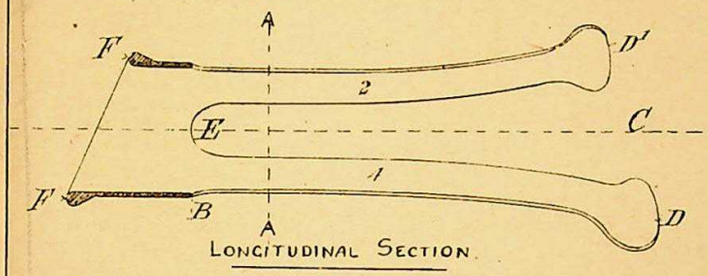
PERSPECTIVE VIEW

FIG. 6.



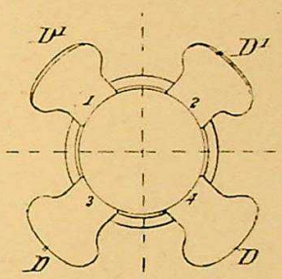
SECTION, A A.

FIG. 2.



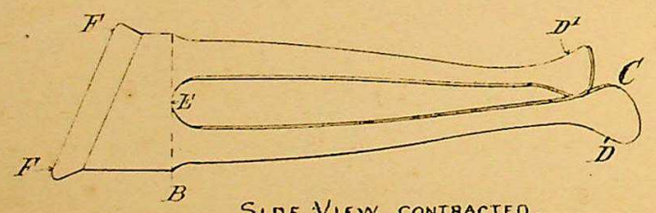
LONGITUDINAL SECTION.

FIG. 4.



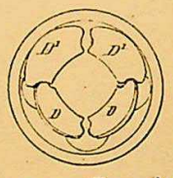
ANTERIOR END VIEW C.
EXPANDED

FIG. 3.



SIDE VIEW. CONTRACTED.

FIG. 5.



ANTERIOR END VIEW C.
CONTRACTED

BLACKBEE'S AUTOMATIC SPECULUM.

SCALE $\frac{2}{3}$.

May be plated with silver or gold.

600/206
× ~~600/224~~

Val 5

LONDON. Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE.
Printers to the Queen's most Excellent Majesty. 1884

Malby & Sons, Photo-Litho

A.D. 1884, 24*th* JANUARY. N° 2054.

Automatic Speculum.

PROVISIONAL SPECIFICATION.

I ROBERT BLACKBEE of 71 Norfolk Road Dalston in the County of Middlesex, Mechanist do hereby declare the nature of my Invention for AN AUTOMATIC SPECULUM to be as follows :—

This Invention consists of a Speculum formed of German Silver tube without Springs, hinges, screws or joints of any kind thus rendering it Automatic in its action by the resiliency of its blades :—and having a table at its posterior end for facilitating operation on the "Os" and "Cervix Uteri :"—thus, this Speculum when introduced into the Vagina adjusts itself without further interference upon the part of the operator, affording an uninterrupted view of the parts to be examined, and remaining "*in situ*" during the operation without pain or inconvenience to the Patient. The following is an example of the construction of the Speculum referred to :—

I take a tube of German Silver or any other suitable metal or material of the requisite length and diameter and mark out on its external surface such parts of the tube as I intend to cut out to effect my purpose. At one end of the tube, (which I shall allude to hereafter as the posterior end or body of the tube) and at a distance about one inch and a half from its edge, I draw a line round the tube parallel to the edge Figs. 1. 2. 3 B from which line I draw eight straight equidistant lines at right angles to it, extending to the other or anterior end of the tube Fig. 6. 1. 2. 3. 4. thus dividing the external surface of the tube into eight equal spaces longitudinally :—at the posterior end of the tube where the longitudinal lines meet the circular line I round off the end of every alternate space Figs. 1. 2. 3 E. and having shortened the anterior ends of the two superior spaces and and rounded them off, and shaping the ends of the two inferior spaces in a similar manner Fig. 1. D. I now cut away every alternate space as marked upon the external surface of the tube, leaving four blades :—two superior and two inferior : the two latter being longer than the two former F 1. 1. 2. 3 4. I now set out these blades from their point of junction with the body of the tube : the two superior outwards and upwards ; the two inferior outwards and downwards. Fig. 1. D. D. D^1. D^1.

I likewise set out the anterior ends of the blades in a similar manner : so as to completely separate the Labiæ and assist in retaining the Speculum "*in situ*" Fig. 4. D. D. D^1. D^1.

[*Price* 6*d*.]

At one inch from the circular line at Fig. 1. B. I cut away a portion of the superior surface of the posterior end of the tube, carrying it diaagonally downwards and backwards Fig. 1. F. F. I now make a suitable ring to fit the edge formed by cutting away the superior half of the posterior end of the tube, and solder it on in the usual way:—thus leaving no sharp or roughened edge on the external surface of the Speculum, and with a similar object in view I round off all the edges of the four blades.

The Speculum may now be plated with silver or gold.

Dated this 24th day of January 1884.

Signed ROBERT BLACKBEE.

COMPLETE SPECIFICATION.

I ROBERT BLACKBEE of 71 Norfolk Road, Dalston, in the County of Middlesex Mechanist, do hereby declare the nature of my Invention for AN AUTOMATIC SPECULUM to be as follows:—

This Invention consists of a Speculum formed of German Silver tube without Springs, hinges, screws or joints of any kind, thus rendering it Automatic in its action by the resiliency of its blades: and having a table at its posterior end for facilitating operations on the "Os" & "Cervix Uteri":—thus, this Speculum when introduced into the Vagina, adjusts itself without further interference upon the part of the operator; affording an uninterrupted view of the parts to be examined, and remaining "*in situ*" during the operation without pain or inconvenience to the patient.

The following is an example of the construction of the Speculum referred to:— I take a tube of German Silver or any other suitable metal or material of the requisite length and diameter: and mark out on its external surface such parts as I intend to cut out to effect my purpose. At one end of the tube, (which I shall hereafter allude to as the posterior end or body of the tube) and at a distance about one inch and a half from its edge I draw a line round the tube parallel to its edge, as shewn at B. Figures 1. 2. 3:—from which line I draw eight straight equidistant lines at right angles to it extending to the other or anterior end of the tube as shewn at C. Figs. 1. 2. 3 thus dividing the external surface of the tube into eight equal spaces longitudinally:—at the posterior end of the tube where the longitudinal lines meet the circular line I round off the end of every alternate space as shewn at E Figures 1. 2. 3:—and having shortened the anterior ends of the two superior spaces half an inch, and rounding them off, and shaping the ends of the two inferior spaces in a similar manner, as shewn at D. D^1, Fig. 1 I cut out every alternate space as marked on the external surface of the tube, leaving four blades: two superior and two inferior, the two latter being longer than the two former as shewn at 1. 2. 3. 4 Fig. 1. I now set out these blades from their point of junction with the body of the tube: the two superior outwards and upwards and the two inferior outwards and downwards as shewn at E. Figs. 1. 2. 3. I likewise set out the anterior ends of the blades in a similar manner so as to completely separate the "Labiæ" and assist in retaining the Speculum "*in situ*" as shewn D. D^1 Fig. 1.

At one inch from the circular line at B. Figures 1. 2. 3 I cut away a portion of the superior surface of the posterior end of the tube carrying it diagonally downwards and backwards as shewn at F. Figs. 1. 2. 3. I now make a suitable ring to fit the edge formed by cutting away the superior half of the posterior end of the tube and solder it on in the usual manner:—thus leaving no sharp or roughened edge on the external surface of the Speculum, and with the same object in view I round off all the edges of the four blades.

The Speculum may now be plated with silver or gold.

Having now particularly described and ascertained the nature of my said Invention and in what manner the same is to be performed, I declare that what I claim is having constructed a Speculum with the following advantages.

1st That when introduced into the "Vagina" it adjusts itself without any further interference upon the part of the operator in such a manner as to afford an uninterrupted view of the parts to be examined or operated upon.

2nd That the blades although resilient have sufficient surface to avoid any sharp angles in the longitudinal direction of the tube; thus causing no pain or uneasiness to the patient when "*in situ*."

3rd That one inch and a half of the tube at its posterior end being entire in its inferior half forms a table, upon which the "Cervix Uteri" will rest, thus affording facility for operation.

Dated this 4th day of March 1884.

ROBERT BLACKBEE.

LONDON: Printed by EYRE AND SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.

1884.